

Notice of Allowability

Application No.

10/677,440

Examiner

Nghi H. Ly

Applicant(s)

ALJADEFF ET AL.

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/02/2003.
2. ☒ The allowed claim(s) is/are 1-41.
3. ☒ The drawings filed on 02 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached:
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-41 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1, 20 and 35, Cockerell, Jr. (US 4,698,781) teaches a method for synchronizing location finding measurements in a wireless network (see Title and Abstract), comprising: receiving transmissions from at least one transmitter at multiple receivers (see fig.1, wireless connection between multiple devices), wherein said multiple receivers are located at predetermined locations with respect to said at least one transmitter (see fig.1, stations 58 are located at predetermined locations), determining actual times-of-arrival of said received transmissions in response to said receiving (see column 1, line 60 to column 2, line 6, column 5, line 31 to column 6, line 6).

Vayanos et al (US 6,429,809) teaches estimating error in timebases of said multiple receivers in conformity with said second computed differences (see column 4, lines 41-46 and column 6, lines 47-65).

Cockerell and Vayanos, alone or in combination, fails to teach first computing differences between said actual times-of-arrival for said multiple receivers to determine actual time-differences-of-arrival for pairs of said multiple receivers, second computing differences between said actual time-differences-of-arrival and theoretical time-differences-of-arrival determined in conformity with said predetermined locations, and correcting measurements of other time-differences-of-arrival of other transmissions in

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conformity with said estimated error.

Dependent claims 2-19, 21-34 and 36-41 are allowable for the same reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. MacDonald (US 5,732,354) teaches method and apparatus for determining the location of a mobile phone.

b. Atarius (US 6,356,608) teaches method and apparatus and system for determining a location of a frequency synchronization signal.

c. Lay (US 5,483,455) teaches method and apparatus for determining the location of a vehicle.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

NHL
8/23/05

Charles Appiah
CHARLES APPIAH
PRIMARY EXAMINER